

**03050206-050**  
**(Providence Swamp)**

**General Description**

Watershed 03050206-050 is located in Orangeburg County and consists primarily of *Providence Swamp* and its tributaries. The watershed occupies 38,648 acres of the Upper and Lower Coastal Plain regions of South Carolina. The predominant soil types consist of an association of the Rains-Goldsboro-Dothan-Noboco-Hobcaw series. The erodibility of the soil (K) averages 0.16; the slope of the terrain averages 1%, with a range of 0-2%. Land use/land cover in the watershed includes: 0.03% urban land, 49.57% agricultural land, 11.62% scrub/shrub land, 0.40% barren land, 36.17% forested land, 2.01% forested wetland (swamp), 0.09% nonforested wetland (marsh), and 0.11% water.

The Providence Swamp accepts drainage from White Cane Branch, Cantey Branch (Ball Branch), Buck Branch, Jack Branch, and Horse Range Swamp (Kettle Branch, Bachelor Branch) before flowing into Four Hole Swamp. There are a total of 51.0 stream miles in this watershed, all classified FW.

**Water Quality**

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
E-051	P	FW	PROVIDENCE SWAMP AT E FRONTAGE RD TO I-95
E-052	W	FW	HORSE RANGE SWAMP AT US 176

***Providence Swamp (E-051)*** - This stream was Class B until April, 1992. Aquatic life uses are fully supported, but there was a significant decreasing trend in dissolved oxygen and a high concentration of zinc measured in 1996. This is a blackwater system, characterized by naturally low pH and dissolved oxygen concentrations. Natural conditions in this stream may have contributed to the observed low dissolved oxygen values. A significant decreasing trend in five-day biochemical oxygen demand suggests improving conditions for this parameter. Recreational uses are fully supported.

***Horse Range Swamp (E-052)*** - This stream was Class B until April, 1992. Aquatic life uses are fully supported. This is a blackwater system, which are often characterized by naturally low pH and dissolved oxygen concentrations. Natural conditions in this stream may have contributed to the observed low dissolved oxygen values. Recreational uses are partially supported due to fecal coliform bacteria excursions.

*A fish consumption advisory has been issued by the Department for mercury and includes the streams within this watershed (see advisory p.31).*

## **Permitted Activities**

### ***Point Source Contributions***

***LAND APPLICATION  
FACILITY NAME***

**TILE FIELD  
I-95 TRUCK STOP**

***PERMIT #  
TYPE***

**ND0067130  
MINOR COMMUNITY**

## **Growth Potential**

**There is a low potential for growth in this watershed; however, I-95 crosses the watershed and some growth may occur around the interchanges of I-95 & U.S. Highway 176 and I-95 & U.S. Highway 15.**